# Observations on the nesting of Imperial Eagle Aquila heliaca in the Kuitun-Zima steppe area, Baikal region, Russia

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Imperial Eagle Aquila heliaca has a wide breeding range in Eurasia from the Balkans to northern China, wintering from east Africa to Singapore and Japan. It is considered Vulnerable owing to its small and declining population, estimated to number 2,500-10,000 individuals (BirdLife International 2000, 2001). There are 900-1,300 pairs in Russia and 1,300-1,800 pairs in other former soviet countries (Belik and Galushin 1999). Included in the former total is a population around Lake Baikal estimated to number 70 pairs in 1999, compared to 250-300 pairs in the 1950s and 150-200 pairs in the mid-1980s (Ryabtsev 1999, 2000a,b). The causes of the decline of this population are not well understood, but do not appear to be associated with land use changes or increased persecution (Ryabtsev 1999). I studied this species in the Kuitun-Zima steppe area, Irkutsk, eastern Baikal region, Russia.

The Kuitun-Zima area (c.54°N 102°E) lies in the catchment of the Oka river (a tributaries of the Angara river) in the western part of the Irkutsk-Cheremkhovo plain at c.400 m with hills to 500–550 m. It mainly lies in Kuitun and Zima districts of Irkutsk region. The habitat is a mosaic formed by typical southern taiga forests of pine, larch and birch, interspersed with dry mountain steppe communities on slopes, and 'northern' steppes. There are also wetlands, originating mainly from old oxbows of the Oka river, but also some bogs resulting from thawing of Quaternary soil ice. The area has been influenced by farming for many hundreds of years, with grazing meadows along river valleys and cultivation of the steppes, although much has been abandoned in recent years.

#### **METHODS**

I carried out fieldwork on 25 days between 9 May and 23 August 2003. Four known Imperial Eagle territories were visited at least three times each. We also searched other territories known to have been used in the past, but found no other active nests. Nests were only approached closely after mid-July when chicks had hatched; prior to this they were only observed from 0.5–2 km distance to avoid any disturbance. Data on diet were based on prey remains and pellets collected near nests in mid-late summer and on visual observations.

#### **RESULTS AND DISCUSSION**

We found four active nests in territories that have been occupied since 1999 at least. A fifth territory contained two old nests and had not been occupied since at least 1999. Each occupied territory contained 2–3 nests. Nests were 0.5–1.5 m in diameter and 1–2 m deep. The average distance between the nests within a territory was  $0.70\pm0.11$  km (n=10, range=0.3–1.4 km). The average distance from the centre of a nest cluster in one territory to the centre of the nest cluster in the nearest territory was  $17.0\pm6.6$  km (n=3, range=4–26 km). Pairs appeared to use areas of c.12–15 km<sup>2</sup> for hunting around nest sites. All nest sites were close to riverine meadows where long-tailed souslik *Spermophilus undulatus* were common.

Three of the females were incubating when first located on 10–13 May. On 30 June–2 July, two nests each contained two chicks covered in white down, with remiges and rectrices starting to emerge. On 2 August, all four chicks were fully feathered, and probably fledged in mid-August. On 20 August, two chicks were found in the third nest. Birds were present at the fourth nest on 13 May, but were absent during two of three visits in the first week of August when the nest appeared to be empty.

Twelve prey items were identified from pellets and direct observations, of which six were long-tailed souslik, three were Carrion Crow *Corvus corone*, with one each of vole *Microtus* sp., Black-billed Magpie *Pica pica*, and a duck *Anas* sp. Ryabtsev (2000b) also found that susliks were the main prey item, followed by birds. Previously we have also recorded steppe polecat *Mustela eversmanii* and domestic duck and chicken amongst food items.

Anecdotal information suggests that the small population of Imperial Eagles in the study area has apparently been fairly stable over the last 20 years, against a background of strong declines in the Baikal region. Cattle pastures in the study site provide good conditions for susliks, the main prey species of Imperial Eagle in the area. However, logging of large trees (potential nest sites), human disturbance at nest sites, and forest fires can threaten the species. A nesting failure in 2003 may have resulted when a forest fire reached c.1 km from the nest.

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## Asian Glossy Starling Aplonis panayensis: first record for Nepal

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At 08h15 on the morning of 18 May 2003 I was birdwatching at Koshi Camp garden (26°35'N 87°05'E) when I heard an unusual call from a bird c.10 metres away. At this point I was joined by Raju Tamang and Anish Timsina. We observed the bird feeding with Common Mynas *Acridotheres tristis* and a Chestnuttailed Starling *Sturnus malabaricus* in a coconut tree. We observed the bird from 5–15 m using 8x42 and 10x50 binoculars. After 30 minutes the flock flew towards the Koshi Tappu Wildlife Reserve and was lost from view.

The bird appeared slightly larger than Chestnuttailed Starling, and behaved similarly. It had dark glossy green upperparts and underparts, with no marking on the back, a stout dark bill and distinct red eyes. There was a small amount of pale glossy streaking on the breast. The legs were dark.

The bird was identified in the field as Asian Glossy Starling *Aplonis panayensis* using Grimmett *et al.* (1998). Later reference to Lekagul and Round (1991), and Ali and Ripley (1989) and discussion with several experts suggested that it was probably a subadult male.

The species ranges from the Philippines through Sulawesi, Borneo, Bali and the Greater Sundas, into continental South-East Asia in Indochina, Myanmar, and eastern India, where it is resident in the Nicobar and Andaman Islands and is a breeding visitor to Assam. It has also been recorded in Meghalaya, Tripura and Bangladesh (Feare and Craig 1998, Grimmett *et al.* 1998). This constitutes the first record for Nepal.

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